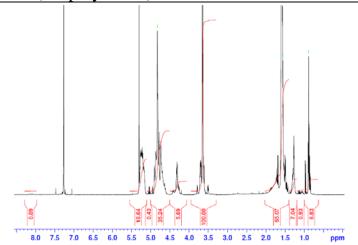
No. AK019

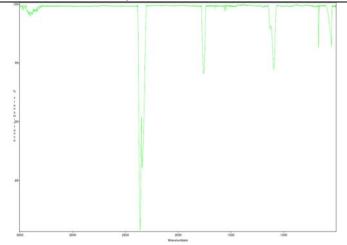
Certificate of Analysis



Product Name: Poly(lactic-co-glycolic acid)-*b*-Poly(ethylene glycol)-*b*-Poly(lactic-co-glycolic acid) copolymers (1,500-1,500-1,500,1:1 LA:GA) (Lot# 60412SJH-A)



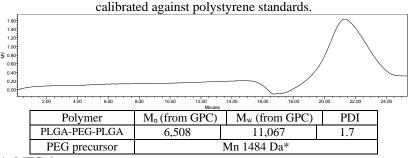
H-NMR Spectrum of copolymers in CDCl3 (Varian Inova 500 MHz instrument) Mn NMR of PLGA-PEG copolymer repeat units: EG-LA/GA: 34*-25/24, Mn: EG-LA/GA: 1,498*-1825/1391 *-MFG data.



FTIR Analysis: Collected from cast-film on KBr salt-plate placed in Satellite FTIR (Thermo-Mattson) and analyzed in transmission mode.

GPC

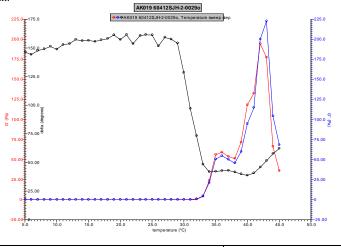
Analysis Method: Waters Breeze 2 system with 1 ml/min DCM flow across three Phenogel 5um columns (Phenomenex). Detection via refractive index, calibrated against polystyrene standards



* -MFG data

Rheology

Rheology performed on AR550 (TA instruments) with 60mm 2degree cone on 20% w/v polymer in water dissolved over 3 days with stirring at 4°C. Viscosity of solution at 0.1 (sec⁻¹) and 5°C was measured (1minute peak hold 5 second test intervals). Rheology performed by oscillating at constant 6.283 rad/s, 0.1% strain, in increments of 2.5°C ranging from 5-45°C with 3 minutes of temperature equilibration at each point.



Viscosity 20% w/v solution at 5°C | 0.5292 Pa/s

• Structure of PLGA-PEG-PLGA triblock copolymers

$$+O - \left(\begin{array}{c|cccc} CH_3 & O & & \\ \hline \\ CH & CH & C \\ \end{array} \right) \begin{array}{c|cccc} CH_2 & O & \\ \hline \\ CH_2 & CH_2 \\ \end{array} \\ CH_2 & CH_2 \\ \end{array} \\ CH_2 & CH_2 \\ CH_3 & CH_2 \\ \end{array} \\ CH_2 & CH_2 \\ CH_3 & CH_2 \\ \end{array}$$

Material provided for research use only. Not for human use.